

## The effects of trade show environments on visitors

Wong, Jehnn-Yih; Li, Tzu-hui; Chen, Annie; Peng, Norman

*Published in:*  
Event Management

*DOI:*  
[10.3727/152599517X15073047237205](https://doi.org/10.3727/152599517X15073047237205)

*Publication date:*  
2017

*Document Version*  
Publisher's PDF, also known as Version of record

[Link to publication in ResearchOnline](#)

*Citation for published version (Harvard):*  
Wong, J-Y, Li, T, Chen, A & Peng, N 2017, 'The effects of trade show environments on visitors', *Event Management*, vol. 21, no. 6, pp. 665-681. <https://doi.org/10.3727/152599517X15073047237205>

### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

### Take down policy

If you believe that this document breaches copyright please view our takedown policy at <https://edshare.gcu.ac.uk/id/eprint/5179> for details of how to contact us.

## THE EFFECTS OF TRADE SHOW ENVIRONMENTS ON VISITORS

JEHN-YIH WONG,\* TZU-HUI LI,\* ANNIE CHEN,† AND NORMAN PENG‡

\*Department of Tourism, Ming Chuan University (TW)

Department of Business Administration, Taiwan, ROC

†Graduate School, University of West London, London, UK

‡Marketing and Business Strategy, University of Westminster, London, UK

---

Tourism trade shows that are open to the public as well as to buyers and sellers are an emerging channel for the promotion of products to potential tourists. However, few studies have explored the influence of environmental stimuli on nonbusiness visitors' emotions. Moreover, the moderating effect of visitors' expectations remains understudied in the context of trade show management. To address this issue, this study reports on research derived from 611 respondents at a Taiwanese tourism trade show through a modified Mehrabian–Russell model. Structural equation modeling of the data shows that positive emotions positively influence behavioral intentions, but negative emotions do not negatively influence behavioral intentions. Among the three stimuli (i.e., information rate, service staff quality, and atmospherics), only information rate and service staff quality positively affect positive emotions and negatively affect negative emotions. The results show that visitors with high and low trade show visit expectations react differently to environmental stimuli at trade shows.

**Key words:** Tourism trade show; Environment; Expectations; Emotions;  
Mehrabian–Russell mode

---

### Introduction

Managing the trade show environment is an important task for trade show organizers because the trade show environment affects exhibitors' and visitors' motivation to attend and return to trade shows in the future (Breiter & Milman, 2006; Jung, 2005; M. J. Lee, Yeung, & Dewald, 2010; Siu, Wan, & Dong, 2012; Smith, Hama, & Smith, 2003). As defined by Schlentrich (1996), trade shows are marketplaces for suppliers of products

and/or services to meet potential buyers. After advertising and personal selling, organizing trade shows constitutes the most expensive marketing activity (Brennan, Canning, & McDowell, 2014; Smith, Gopalakrishna, & Smith, 2004). According to M. J. Lee et al. (2010), one fifth of the marketing budget for all US business-to-business firms is spent on trade show participation. This is because many consumers attend trade shows to compare offers and to trade (M. J. Lee et al. 2010; Shipley, Egan, & Wong, 1993; Smith et al., 2003).

Address correspondence to Norman Peng, Ph.D., University of Westminster, Westminster Business School, 35 Marylebone Road, NW1 5LS, London, UK. Tel: +44-(0)20-7911-5000; E-mail [n.peng@westminster.ac.uk](mailto:n.peng@westminster.ac.uk)

Within the trade show industry, the importance of the Asia-Pacific market is increasing. During the period between 2006 and 2011, the Asia-Pacific trade show market grew by 38%, which represents approximately three times greater market growth than its North American and European counterparts (Y. F. Chen & Mo, 2012; Ministry of Economic Affairs [MOEA], 2008; UFI, 2012). The growth of the Greater Chinese markets, despite the global financial crisis, which began in 2008, and the increasing number of nonindustrial trade show visitors in Asia are two likely reasons for this growth (J. Y. Wong, Li, Peng, & Chen, 2014).

Scholars have been interested in exploring trade shows from different perspectives. However, most existing studies have focused on the relationships among convention centers, exhibitors, and business traders. Few studies have explored the consumption behavior of nonbusiness visitors and the implications of such behavior for exhibitors, trade show organizers, and conference center managers (Seringhaus & Rosson, 2001; Tanner Jr., 2002; J. Y. Wong et al., 2014).

This study's examination of nonbusiness trade show visitors provides several contributions to existing theory and practice. First, this study conceptualizes the effect of trade show stimuli (i.e., information quality, service staff quality, and atmospherics) on nonbusiness visitors' emotions. Second, by incorporating the "information rate" into the proposed model, this study provides additional insights into the influence of one of the key products of trade shows: information. Third, by examining the moderating effect of expectation, this study examines the way that stimuli affect nonbusiness visitors. Finally, this research has implications for practitioners. Due to the gaps in the literature, trade show organizers are not fully aware of the types of environments that are suitable for exhibitors who want to target nonbusiness buyers; exhibitors who want to target nonbusiness buyers do not know what environment they should ask organizers and conference centers to provide, and convention centers do not fully understand how to effectively satisfy the needs of trade show organizers and exhibitors who want to target nonbusiness visitors.

To provide the contributions discussed above, this study examines Taiwanese tourism trade show

visitors through a modified Mehrabian–Russell model (M-R model). Trade shows are a particularly important channel for travel, tourism, and hospitality service providers because their products are often perishable, intangible, and seasonal (J. Y. Wong et al., 2014; U. Yuksel & Voola, 2010). During tourism trade shows, new information on domestic and overseas travel, tourism cultural exchange, and accommodation and meal discount coupons are provided to visitors (Taiwan Visitors Association, 2017). It is in these service providers' interest to gather as many potential buyers in a designated area during a fixed period as possible. In addition, many Asian nonbusiness visitors attend tourism trade shows to find new offers, to see what others are buying, and to compare products (M. J. Lee et al., 2010; J. Y. Wong et al., 2014). Apart from having new and competitive products, superior service staff quality and positive atmospherics are also crucial to service providers' performances in trade shows (Breiter & Milan, 2006; Smith et al., 2004; Siu et al., 2012; Wu & Weber, 2005).

The M-R model is believed to be suitable for this research for three reasons. First, the M-R model was designed to examine the influence of environmental stimuli on individuals' emotions and responses (Mehrabian & Russell, 1974). Second, the M-R model and its modifications have been used to study consumption scenarios, such as retail shops and restaurants (A. Chen, Peng, & Hung, 2015; Jang & Namkung, 2009; Kalcheva & Weitz, 2006; Koo & Ju, 2010; Ong & Khong, 2011; Tai & Fung, 1997; A. Yuksel, 2007). Third, three important factors that contribute to the appeal of trade shows for visitors have been examined by previous scholars who have adapted the M-R model: product quality, service staff quality, and atmospherics (Breiter & Milan, 2006; A. Chen et al., 2015; Jang & Namkung, 2009; Koo & Ju, 2010; Smith et al., 2004; Siu et al., 2012; Wu & Weber, 2005).

This study has three aims. First, this study aims to conceptualize nonbusiness visitors' intentions using a modified M-R model. The study investigates how stimuli from tourism trade shows affect visitors' positive and negative emotions, which in turn affect their behavioral intentions. Second, this study examines how visitors' emotions are affected by the information richness (i.e., complexity and novelty) of tourism trade shows. To this end, a new

factor, “information rate,” is incorporated into the modified M-R model along with service staff quality and atmospherics. Third, the study tests the moderating effect of visitors’ expectations of trade shows. Specifically, this study examines the ways in which expectations can affect the relationship between stimuli and visitors’ emotions. Finally, the implications for trade show organizers and trade show exhibitors are discussed.

### Literature Review

#### *Mehrabian–Russell Model and Previous Studies on Trade Show Visitors*

To further understand the influence of the trade show environment on trade show visitors’ consumption behavior, this research aims to examine attendees through a modified M-R model. Mehrabian and Russell’s (1974) study examined the influences of environmental stimuli on individuals’ emotions and responses. According to Mehrabian and Russell, stimuli (S) can affect individuals’ emotions (O), which in turn influence their responses (R).

The M-R model and its modifications have been applied in retail, restaurant, leisure, and tourism contexts. The specific contexts that have been examined include shopping (Ong & Khong, 2011; Tai & Fung, 1997), retail marketing (Kaltcheva & Weitz, 2006), online shopping (Koo & Ju, 2010), tourist shopping behavior (A. Yuksel, 2007), and restaurant management (A. Chen et al., 2015; Jang & Namkung, 2009). The findings of these studies have generally supported the notion that stimuli affect consumers’ emotions, which in turn influence their responses (e.g., revisiting and/or recommending).

Among the research that has adapted the M-R model to examine the influence of the consumption environment on consumers’ emotions and behavioral intentions, researchers consider product quality, service staff quality, and atmospherics important (A. Chen et al., 2015; Jang & Namkung, 2009; Kaltcheva & Weitz, 2006; Koo & Ju, 2010; Ong & Khong, 2011; Tai & Fung, 1997; Yuksel, 2007). Within studies on trade shows, scholars have also confirmed the importance of service staff quality, atmospherics, and information/product quality (Breiter & Milman, 2006; Jung, 2005; M. J. Lee et al., 2010).

Service staff quality refers to customers’ overall perception of the relative inferiority or superiority of a service staff (A. Chen et al., 2015). Kotler (1973) defined atmospherics as the conscious design of space to create certain buyer effects. The main aim is to increase purchase probability. Because one of the main products in tourism trade shows is information (Scletrich, 1996; Shipley et al., 1993; Smith et al., 2003), this study focuses on information when examining the product quality of trade shows. According to Gilboa and Rafaeli (2003), the information rate can be included in the M-R model when the environment under examination contains a high amount of information for customers to consume. Emotions are defined as affective responses that are specifically generated during product usage or consumption experiences (H. Han & Ryu, 2009; King & Meiselman, 2010; King, Meiselman, & Carr, 2010). Behavioral intention is defined as the desire to attempt to perform a certain behavior (Ajzen, 1991).

Although the influence of stimuli (e.g., service personnel, product quality, and atmospherics) on consumers’ emotions and the factors that affect trade show visitors’ behavior have been explored, areas for future research remain (e.g., Jung, 2005; J. Y. Wong et al., 2014). First, A. Chen et al. (2015), Jang and Namkung (2009), and Liu and Jang (2009) recommended using the unipolar approach to examine emotions (i.e., the coexistence of positive and negative emotions) rather than considering emotions through the traditional bipolar approach of the M-R model (i.e., either positive or negative emotions). The concept of negative emotions can benefit from additional research because the results regarding their influence have been inconsistent. For example, Jang and Namkung (2009) found that only positive emotions affected diners, whereas A. Chen et al. (2015) and Liu and Jang (2009) confirmed that both types of emotions affected diners.

Second, M. J. Lee et al. (2010) suggested that studies of how trade show organizers can select and how convention centers can provide an environment that matches nonbusiness visitors’ needs could advance research and practice regarding trade show management. Similarly, J. Y. Wong et al. (2014) noted that the influence of the trade show environment on nonbusiness visitors remains underinvestigated. J. Y. Wong et al. (2014) suggested that

future scholars should explore the appeal of the trade show environment through existing consumer behavior-related theory. Finally, Jung (2005), who studied telecommunication trade shows, recommended that future scholars should investigate other industries' trade shows because the factors that affect visitors may be context dependent.

### *The Influence of Visitors' Expectations*

This research incorporates visitors' expectations into the proposed framework as a moderating variable. According to Devlin, Gwynne, and Ennew (2002), expectations are what customers feel they should receive. Harrington, Ottenbacher, and Kendall (2011) found that expectations are one of the most important factors that affect customers' behavioral intentions. Expectations have been applied to the study of trade show exhibitors because consumers visit trade show with the expectation of finding products they need and enjoying the atmosphere (Breiter & Milman, 2006; Kozak & Kayar, 2008). Nevertheless, the moderating effect of expectations has received little attention.

The current trade show literature provides limited findings regarding how nonbusiness visitors with high expectation are different from or similar to visitors with low expectations. In the context of a luxury restaurant, expectations have been found to moderate the relationship between a restaurant's environment and diners' emotions (A. Chen et al., 2015). However, these findings may not be transferrable to the context of trade shows because trade shows differ from luxury dining in terms of their function. Expectations regarding trade shows may not moderate this relationship for visitors the same way as it moderates the relationship for diners. Additional research into the moderating effect of expectations in the context of trade shows would be beneficial to the existing trade show management literature.

As indicated by this review of the current literature on nonbusiness visitor behavior during trade shows, the study of nonbusiness trade show visitors could contribute to theory and practice, such as conceptualizing the effect of trade show stimuli on nonbusiness visitors' emotions, exploring the influence of information in trade shows, and

differentiating visitors based on their expectations. Because of this gap in the literature, practitioners such as exhibitors, organizers, and conference centers may not be able to effectively meet the needs of nonbusiness visitors.

### *Research Framework and Hypotheses*

Based on a review of studies related to the M-R model and consumers' expectations, this study adopts the models used by Jang and Namkung (2009). Their framework showed that stimuli (i.e., atmospherics, product quality, and service quality) can affect the positive and negative emotions of consumers. In addition, these authors proposed that both types of emotions affect consumers' behavioral intentions. Additionally, this study incorporates visitors' expectations into the framework as a moderator. Figure 1 shows this study's proposed framework. Each hypothesis is discussed below.

The first relationship that is examined in this research is the impact of service staff quality on trade show visitors' emotions. In previous studies that have used the M-R model, emotion has been found to be an important component that mediates the relationship between stimuli and responses (A. Chen et al., 2015; Jang & Namkung, 2009). In earlier research that adopted the M-R model, only positive emotions (i.e., pleasure, arousal, and dominance) were examined. However, Jang and Namkung (2009), Liu and Jang (2009), and Westbrook (1987) suggested that it is necessary to consider negative emotions (e.g., anger, disgust, distress) when researching diners' restaurant consumption behavior. The aforementioned authors suggested that positive emotions and negative emotions are not the same construct; hence, they should be examined as separate factors.

In the trade show context, service personnel at a trade show have several opportunities to interact with attendees, such as greeting visitors, giving directions, and providing refreshments (Breiter & Milan, 2006; Hume, 2008; Jung, 2005; O'Hara, 1993; Smith et al., 2004). According to Baloglu and Love (2001), service staff quality is among the most important criteria when firms select convention/exhibition centers for meetings. In the context of a trade show, the service staffs' helpfulness and

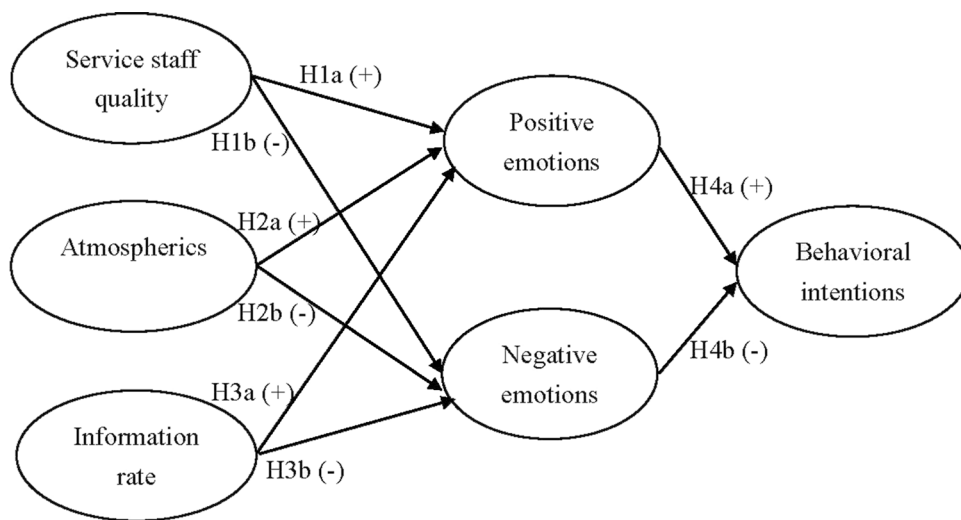


Figure 1. Research framework.

reliability are often considered. Previous studies have shown that good service staff quality can positively affect consumers' positive emotions, whereas poor service staff quality can exacerbate consumers' negative emotions (A. Chen et al., 2015; Jang & Namkung, 2009). This study proposes that non-business trade show attendees' perceptions of the quality of service staff will have positive effects on their positive emotions and negative effects on their negative emotions.

**H1a:** Visitors' perceptions of a trade show staffs' quality is positively related to positive emotions.

**H1b:** Visitors' perceptions of a trade show staffs' quality is negatively related to negative emotions.

The second hypothesis that is examined is the influence of atmospherics on emotions. Based on studies of retail shops, convention centers, and shopping malls, Breiter and Milman (2006), A. Chen et al. (2015), Kaltcheva and Weitz (2006), Koo and Ju (2010), and Ong, Khong, Faziharudean, and Dai (2012) found that atmospherics have a significant impact on customers. Key techniques include applying suitable color, lighting, music, and décor to a service environment (A. Chen et al., 2015; Koo & Ju, 2010; Ong et al., 2012). Studies by Jang and Namkung (2009) and Liu and Namkung (2009) found that positive atmospherics contributed to

diners' positive emotions, whereas negative atmospherics enhanced diners' negative emotions. Siu et al. (2012) and Wu and Weber (2005) confirmed that a convention center's atmosphere, such as its ambience, is important to trade show visitors. Furthermore, Siu et al. (2012) found that a convention center's atmospherics could positively influence visitors' affect. In other words, creating or having appropriate atmospherics during trade shows is an important task for organizers. The following hypotheses are derived from previous studies on trade shows and service environments.

**H2a:** Visitors' perceptions of a trade show's atmospherics are positively related to positive emotions.

**H2b:** Visitors' perceptions of a trade show's atmospherics are negatively related to negative emotions.

The third hypothesis that this study examines is the effect of the environment's information rate on visitors' emotions. In previous retail and hospitality studies that have adopted the M-R model, scholars have found that the quality of the chosen product affects customers' emotions (A. Chen et al., 2015; Grohmann, Spangenberg, & Sprott, 2007; Jang & Namkung, 2009; Koo & Ju, 2010; S. Lee, Ha, & Widdows, 2011; Ryu, Lee, & Kim,



2012; Walsh, Shiu, Hassan, Michaelidou, & Beatty, 2011). However, the products included are tangible, such as dishes.

During tourism trade shows that are open to the public, exhibitors attempt to sell accommodation and meal discount coupons. The opportunity to compare offers and the opportunity to gather new information are two important services that organizers offer to exhibitors and attendees (Scletrich, 1996; Shipley et al., 1993; Smith et al., 2003). For this reason, this study focuses on "information rate," which represents the degree of information inputs in a channel during a certain period of time (Penz & Hogg, 2011). In retail settings, Tai and Fung (1997) defined the information rate as the degree of novelty (e.g., the level of surprise and unexpectedness) and complexity (e.g., the number of elements or features) of the stimuli in the environment.

According to J. Y. Wong et al. (2014), information is particularly important for tourism trade shows because the products are intangible, and multiple vendors sometimes offer similar products. Considering previous studies' findings on the influence of product quality (Jang & Namkung, 2009; Tai & Fung, 1997; Walsh et al., 2011), this study proposes that the perception of a high information rate can positively affect tourism trade show attendees' positive emotions, whereas the perception of a low information rate enhances their negative emotions.

**H3a:** Visitors' perceptions of a trade show's information rate are positively related to positive emotions.

**H3b:** Visitors' perceptions of a trade show's information rate are negatively related to negative emotions.

In addition to the antecedents of emotions, this study explores the influence of emotions on nonbusiness attendees' behavioral intentions. Trade show organizers organize trade shows by renting the space from convention centers, charging exhibitors for using the space to promote their products, and charging visitors admission fees (Smith et al., 2003). Hence, it is beneficial for organizers to increase attendees' intention to revisit and their intention to recommend. Liu and Jang (2009) and Jang and Namkung (2009) found that diners' positive

emotions improved their behavioral intentions, such as intentions to revisit and intentions to recommend. Liu and Jang's (2009) research on Chinese diners showed that negative emotions reduced customers' behavioral intentions. Based on the research presented above, this study hypothesizes that there is a positive relationship between positive emotions and behavioral intentions and that negative emotions have a negative effect on behavioral intentions.

**H4a:** Visitors' positive emotions are positively related to behavioral intentions toward trade shows.

**H4b:** Visitors' negative emotions are negatively related to behavioral intentions toward trade shows.

The fifth hypothesis this research examines is the ability of expectation to moderate trade show visitors' behavior. In the context of this research, expectation can be defined as what visitors feel they should receive when visiting tourism trade shows (Devlin et al., 2002). In a trade show context, some visitors will have higher expectations (e.g., those who are planning to make a purchase), whereas others will have lower expectations (e.g., those who are just browsing). These visitors may react differently to trade show stimuli. In previous studies, A. Chen et al. (2015), Yi and La (2004), and I. A. Wong and Dioko (2013) showed that expectations (i.e., high or low) could moderate the influence of stimuli on customers' emotions. To date, no known study has examined how the influences of trade show stimuli on nonbusiness visitors are moderated by expectations. Based on the literature on customer expectations and trade show management, and previous research that has applied expectations to the M-R model (e.g., Breiter & Milman, 2006; A. Chen et al., 2015; Kozak & Kayar, 2008), this study hypothesizes that visitors' emotions are more significantly influenced by a trade show's stimuli when visitors have higher expectations.

**H5:** Attendees' expectation level (i.e., high or low) moderates the path from stimuli to emotions. Specifically, the relationship between trade show stimuli and emotions is stronger for the high expectation group than for the low expectation group.

## Research Method

### *Sampling and Data Collection Methods*

To examine the proposed framework, this study focuses on the Taipei International Travel Fair (ITF). The ITF, which is held annually, is the most popular tourism trade show in Taiwan and attracts domestic as well as foreign visitors and exhibitors. According to the ITF (Taiwan Visitors Association, 2017), the main aim is to build a platform for exchange and to assist the domestic travel industry in linking with its international counterparts. During the event, new information on domestic and overseas travel, tourism cultural exchange, and accommodation and meal discount coupons are provided to visitors. At the ITF, it is common for more than 950 vendors to promote their products to approximately 90,000 visitors daily (Taiwan Visitors Association, 2015). Among these visitors, nearly 30,000 are noncorporate attendees (J. Y. Wong et al., 2014). This was the sampling population of the present study.

Eight trained tourism postgraduate students were sent to the exhibition center to survey nonbusiness visitors. The surveys were collected in the conference center and at its entry/exit points to increase the probability of meeting visitors. According to King et al. (2010), the most appropriate time to evaluate emotions is during or immediately after exposure to a stimulus.

An interception technique was used to approach visitors. For visitors who agreed to participate in this research, the purpose of the research was explained, and then a set of screening questions was asked. To qualify for an interview, potential participants were required to be above the age of 18 years and have visited the ITF for nonbusiness purposes. Once they had passed the screening questions, the main survey was given to the respondents. Trained student interviewers checked for missing data, debriefed the respondents, and thanked them for their assistance once the survey was returned. A convenience sampling technique was used. This study's procedures were similar to those of previous trade show management studies (Kozak & Kayar, 2008; J. Y. Wong et al., 2014) and studies on business environments using the M-R model (A. Chen et al., 2015; Jang & Namkung, 2009).

After 4 days of data collection, a total of 779 questionnaires were completed by visitors. Of these, 611 questionnaires were usable. The response rate was 78.4%. The participants were primarily male (56.6%), university or college educated (64.6%), and between the ages of 31 and 40 years (35.4%) (Table 1).

### *Questionnaires Used in the Main Study*

The participants completed a survey that consisted of two sections. In the first section, visitor demographics such as gender and age were tracked. The second section consisted of 24 statements about visitors' behavioral intentions, emotions, and their perception of the trade show's stimuli. These statements were generated from a review of previous trade shows, tourism trade shows, and environmental psychology studies.

Five items were used to evaluate the atmospherics (Jang & Namkung, 2009). Three items were used to evaluate the information rate (Tai & Fung, 1997). To measure service staff quality, four items were included (J. Y. Wong et al., 2014). To measure positive emotions, three items were used (Jang & Namkung, 2009). Three items were included to measure negative emotions (A. Chen et al., 2015). Finally, three items were used to measure behavioral

Table 1  
Characteristics of the Participants ( $N = 611$ )

Variable/Demographic Traits	
<b>Gender</b>	
Male	56.6%
Female	43.4%
<b>Marital status</b>	
Married	62.2%
Unmarried	37.8%
<b>Age</b>	
18–20	2.4%
21–30	14.4%
31–40	35.4%
41–50	23.1%
51–60	12.6%
61 or above	12.1%
<b>Education</b>	
Lower than high school degree	0.8%
High school degree	10.8%
University or college degree	64.6%
Postgraduate degree or above	23.7%



intentions (Jang & Namkung, 2009). To make the questions relevant to tourism trade shows, the contexts and products in the original questions, such as “restaurants” and “food,” were modified to “trade shows” and “tourism products,” respectively. To maintain consistency, a 5-point Likert-type scale was used when designing the items (i.e., 1 = *strongly disagree*, 2 = *disagree*, 3 = *neither agree nor disagree*, 4 = *agree*, and 5 = *strongly agree*). The items from A. Chen et al.’s (2015) and Jang and Namkung’s (2009) studies were changed from a 7-point Likert-type scale to a 5-point Likert-type scale. This modification was not expected to have a significant impact on the analysis of the data (Leung, 2011).

The target research question under examination was as follows: “How do tourism trade show stimuli and visitors’ expectations influence nonbusiness visitors’ behavioral intentions?” The items were all found to be reliable, with Cronbach’s alpha values ranging from 0.81 to 0.95. Some of the items were rephrased to maintain consistency. The items for each variable are presented in Table 2.

### Data Analysis

#### Measurement Model

IBM SPSS AMOS 20 was used to analyze the data. Confirmatory factor analysis (CFA) was conducted ( $N = 611$ ). The fit indices for the CFA showed there was good fit ( $\chi^2/df = 2.415$ ;  $p < 0.001$ , RMSEA = 0.048, CFI = 0.967, NFI = 0.945, TLI = 0.96). Based on the CFA results, this research analyzed the convergent validity, discriminant validity, and composite reliability of all the multiitem scales, following the guidelines from previous literature (Fornell & Larcker, 1981). The results can be found in Table 2. First, the composite reliability of the research constructs, indicating the internal consistency of multiple indicators for each construct, ranged from 0.83 to 0.97. This result exceeds the recommended threshold (0.60) outlined by Bagozzi and Yi (1988). Second, convergent validity was assessed in terms of factor loadings and average variance extracted (AVE). According to Fornell and Larcker (1981), AVE is the average variance shared between a construct and its measurement. As shown in Table 2, the factor loadings of all items were higher than 0.70, and AVE values ranged from

0.50 to 0.91; hence, convergent validity was confirmed (Fornell & Larcker, 1981).

Third, discriminant validity was assessed by comparing the AVE of each individual construct with the shared variance between this individual construct and all the other constructs. Because the AVE value for each construct was greater than the squared correlation between constructs, discriminant validity was achieved (Table 3). After CFA was performed based on Bagozzi’s (1983) and Kline’s (2005) recommendations, this study’s variables, composite reliability, convergent validity, and discriminant validity were found to be acceptable. Therefore, the items were suitable for the use of the average of each factor.

#### Structural Model

The results gathered using structural equation modeling show a good fit [ $\chi^2(178) = 457.3$ ,  $\chi^2/df = 2.57$ ;  $p < 0.001$ , RMSEA = 0.051, CFI = 0.970, NFI = 0.952, TLI = 0.965]. Thus, the results of this study provide support for the proposed framework. Regarding the hypotheses, H1a and H1b are supported with structural estimates of 0.34 ( $t = 4.31$ ,  $p < 0.001$ ) and  $-0.41$  ( $t = -4.50$ ,  $p < 0.001$ ), respectively. This means that the quality of a trade show’s service staff significantly affects visitors’ positive and negative emotions. H2a and H2b are rejected with structural estimates of 0.08 ( $t = 0.73$ ,  $p > 0.1$ ) and  $-0.08$  ( $t = -0.63$ ,  $p > 0.1$ ), respectively. In other words, atmospherics do not influence visitors’ positive and negative emotions. This study’s findings support H3a and H3b. The structural estimates are 0.21 ( $t = 4.82$ ,  $p < 0.001$ ) and  $-0.31$  ( $t = -6.03$ ,  $p < 0.001$ ), respectively. This means that information rates have a significant impact on visitors’ positive emotions and on their negative emotions. Finally, this study’s findings support H4a but not H4b. The structural estimates are 0.66 ( $t = 12.32$ ,  $p < 0.001$ ) and  $-0.03$  ( $t = -0.77$ ,  $p > 0.1$ ), respectively. This means that positive emotions affect visitors’ behavioral intentions toward trade shows, but negative emotions do not affect visitors’ behavioral intentions toward trade shows (Table 4, Fig. 2).

#### Mediating Effect

Several studies have shown that emotions can mediate the relationship between a stimulus and

Table 2  
Descriptive Analysis of the Measures

Variable/Measurement items	Mean	SD		AVE	CR
<b>Information rate (IR)</b>			0.86	0.67	0.86
IR1: The products in the trade show are interesting.	3.74	0.85			
IR2: There are a wide variety of tourism products.	3.85	0.83			
IR3: The products in this trade show are up to date.	3.68	0.89			
<b>Atmospherics (A)</b>			0.81	0.50	0.83
A1: The facility layout allows me to move around easily.	4.07	0.61			
A2: The lighting in the exhibition center is appropriate.	3.78	0.78			
A3: The exhibition center has sufficient restrooms.	3.73	0.79			
A4: The temperature in the exhibition center is comfortable.	3.73	0.77			
A5: The decoration in the exhibition center is impressive.	4.07	0.70			
<b>Service staff quality (SSQ)</b>			0.89	0.66	0.89
SSQ1: Sales staff members are willing and able to provide service in a timely manner.	3.92	0.73			
SSQ2: Sales staff members make the effort to understand my needs.	3.83	0.74			
SSQ3: Sales staff members are competent (i.e., knowledgeable and skillful).	3.81	0.76			
SSQ4: The staff members are reliable.	3.85	0.75			
<b>Expectation (E)</b>			0.90	0.76	0.91
E1: Before my experience with tourism trade show, I expected that the overall service performance would be: <i>Very poor</i> (1)– <i>Excellent</i> (5).	3.55	0.85			
E2: Before my experience with tourism trade show, I expected that its ability to perform the promised service reliably and accurately would be: <i>Extremely incompetent</i> (1)– <i>Extremely competent</i> (5).	3.56	0.87			
E3: Before my experience with tourism trade show, I expected that its ability to meet my personal needs would be: <i>Not at all satisfactory</i> (1)– <i>Extremely satisfactory</i> (5).	3.48	0.92			
<b>Positive emotions (PE) I feel. . .</b>			0.87	0.69	0.87
PE1: Joy (joyful, pleased, welcoming)	3.82	0.78			
PE2: Excitement (thrilled, enthusiastic)	3.78	0.83			
PE3: Refreshment (cool, revived)	3.82	0.77			
<b>Negative emotions (NE) I feel. . .</b>			0.91	0.78	0.91
NE1: Anger (angry, irritated)	1.60	0.89			
NE2: Distress (frustrated, disappointed, upset)	1.55	0.90			
NE3: Disgust (disgusted, displeased, bad)	1.44	0.86			
<b>Behavioral intentions (BI)</b>			0.95	0.91	0.97
BI1: I would like to come back to this trade show in the future	4.08	0.81			
BI2: I plan to revisit this trade show in the future	4.10	0.82			
BI3: I would recommend this trade show to my friends or others.	4.07	0.80			

Note. CR, composite reliability; AVE, average variance extracted.

Table 3  
Correlation Between Constructs Following CFA

	SSQ	A	IR	PE	NE	BI	E
Service staff quality (SSQ)	<b>0.943</b>						
Atmospherics (A)	0.624	<b>0.911</b>					
Information rate (IR)	0.361	0.285	<b>0.927</b>				
Positive emotions (PE)	0.375	0.289	0.316	<b>0.932</b>			
Negative emotions (NE)	−0.408	−0.310	−0.385	−0.333	<b>0.953</b>		
Behavioral intentions (BI)	0.349	0.288	0.354	0.492	−0.199	<b>0.984</b>	
Expectation (E)	0.406	0.338	0.427	0.372	−0.372	0.282	<b>0.953</b>

<sup>a</sup>Bold numbers on the diagonal parentheses are square root of each construct's AVE value;  $p < 0.01$ .

Table 4  
Hypotheses Tests ( $N = 611$ )

Path	Standard Estimate	<i>t</i>	Test
H1a: SSQ→PE	0.34	4.31***	Support
H1b: SSQ→NE	-0.41	-4.50***	Support
H2a: A→PE	0.08	0.73	Reject
H2b: A→NE	-0.08	0.63	Reject
H3a: IR→PE	0.21	4.82***	Support
H3b: IR→NE	-0.31	6.03***	Support
H4a: PE→BI	0.66	12.32***	Support
H4b: NE→BI	-0.03	-0.77	Reject

Note. SSQ, service staff quality; A, atmospherics; IR, information rate; PE, positive emotions; NE, negative emotions; BI, behavioral intentions.

\*\*\* $p < 0.001$ .

behavioral intentions (e.g., A. Chen et al., 2015; Jang & Namkung, 2009; Liu & Jang, 2009; Ryu et al., 2012). Following previous research, this study examined the mediating effects of emotions. A Sobel test was performed to determine the mediating effects of visitors' positive and negative emotions on the relationships between trade show stimuli (i.e., information rate, service staff quality, and atmospherics) and behavioral intentions (Sobel, 1982). The results ( $Z > 1.96$ ) showed that visitors' positive emotions fully mediated the relationships between information rate and behavioral intentions

and between service staff quality and behavioral intentions (Table 5).

### Moderating Effect

To test the hypothesized moderating effects of visitors' expectations, an invariance analysis of different groups was applied (Jurosowski & Gursoy, 2004) using the procedure recommended by Y. J. Han, Nunes, and Dreze (2010) and Bell and Menguc (2002). Using their recommended steps, the participants were divided into two groups (i.e., high and low expectations) based on their scores. In other words, the participants ( $N = 611$ ) were ranked in order from highest to lowest according to their expectation level. Participants who scored higher than the average composed the high expectation group ( $N = 314$ ), and those who scored below the average composed the low expectation group ( $N = 297$ ). The threshold that separated the two groups was 3.53.

Initially, the structural models for the high and low expectation groups were estimated without across-group constraints (i.e., unconstrained models;  $\chi^2 = 741.5$ ). Then, across-group constraints (i.e., constrained model;  $\chi^2 = 864.3$ ), in which the parameter estimates for the high and low expectation groups were constrained to be equal, were

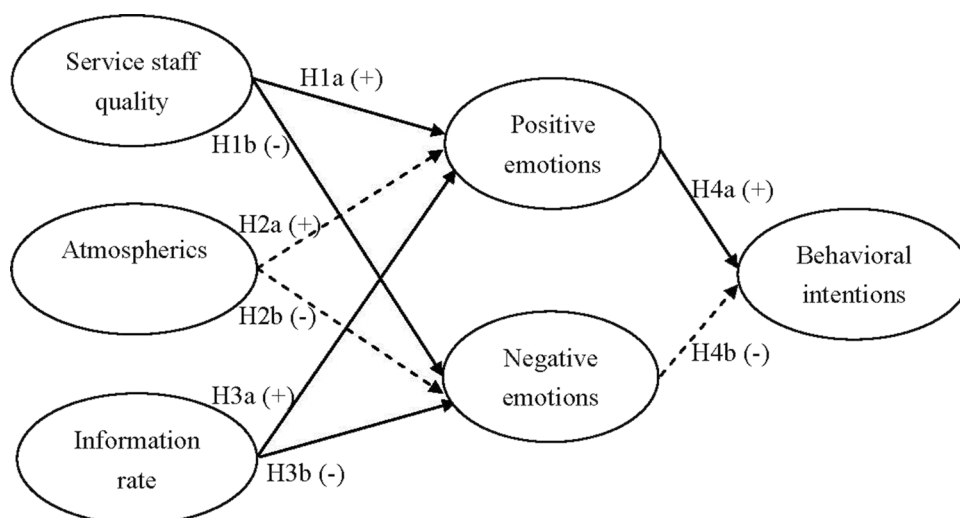


Figure 2. Results from hypotheses testing ( $N = 611$ ).  $\chi^2(178) = 457.3$ ,  $\chi^2/df = 2.57$ ,  $p < 0.01$ ; RMSEA = 0.051; CFI = 0.970; NFI = 0.952; TLI = 0.965.

Table 5  
Results From Sobel Test

Mediator/Independent Variable	Relation With Behavioral Intentions	Proposed Hypotheses and Results	Emotion's Mediating Effect
<b>Positive emotions</b>			
Service staff quality	Significant	H1a: Support	Fully mediate
Atmospherics	Insignificant	H2a: Reject	No effect
Information rate	Significant	H3a: Support	Fully mediate
<b>Negative emotions</b>			
service staff quality	Significant	H1b: Support	No effect
Atmospherics	Insignificant	H2b: Reject	No effect
Information rate	Significant	H3b: Support	No effect

applied. Finally, a chi-square test comparing the unconstrained and constrained models was used to detect any moderating effects. The results showed some differences between visitors with high expectations and visitors with low expectations in terms of trade show visiting behavior. Specifically, this study's proposed model applied to visitors with high and low expectations, except in two areas. For visitors with higher expectations, service staff quality affected their positive emotions and negative emotions; however, service staff quality did not affect the emotions of visitors with lower expectations (Fig. 3). The next section discusses some of the implications of this study's findings and its contributions to the literature.

## Discussion

This study examined the influence of tourism trade show stimuli and visitors' expectations on nonbusiness attendees' emotions and behavioral intentions by using a modified M-R model. The results of the data analysis supported this study's proposed framework. Trade show stimuli (i.e., service staff quality and information rate) were likely to significantly influence visitors' positive and negative emotions. However, only positive emotions were found to affect visitors' subsequent responses (i.e., intentions to revisit and intentions to recommend). Additionally, the results of this study confirmed that visitors' expectations (i.e., high or low) were found to moderate the relationship between

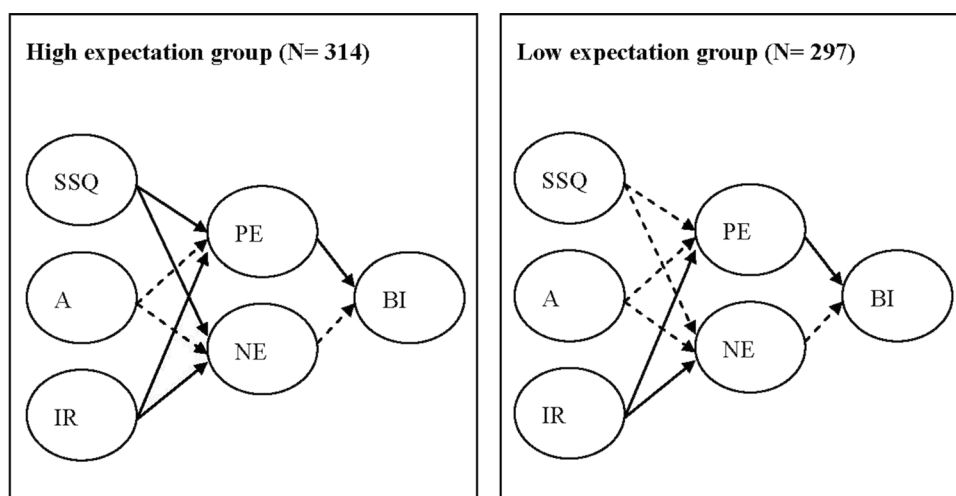


Figure 3. Visitor expectation's moderating effect. SSQ, service staff quality; A, atmospherics; IR, information rate; PE, positive emotions; NE, negative emotions; BI, behavioral intentions.

trade show stimuli and visitors' emotions. This study's findings were generally consistent with the trade show management literature. However, several issues warranted further discussion.

#### *Theoretical Implications: The Influence of Emotions*

This study's results showed that positive emotions were likely to affect visitors' behavioral intentions toward tourism trade shows, but negative emotions were not found to affect visitors' behavioral intentions. The literature has consistently supported the idea that positive emotions are likely to positively affect behavioral intentions, but the literature has been inconsistent regarding the influence of negative emotions on behavioral intention. For instance, A. Chen et al.'s (2015) and Liu and Jang's (2009) studies supported the notion that negative emotions were likely to affect customers' subsequent behavior, whereas Jang and Namkung's research (2009) did not support that notion.

The result regarding negative emotions has three possible explanations. First, tourism trade shows offer visitors an opportunity to explore new products, to compare offers, and to trade. However, the products (e.g., flight tickets, hotel accommodations, and package tours) are not consumed until afterward. For this reason, negative emotions, such as anger, distress, or disgust during trade show participation are less likely to be related to visitors' behavioral intentions. Second, the admission fee for the ITF is quite low, typically ranging from free to \$7 per adult. This minimal fee might contribute to the inability of negative emotions to affect behavioral intentions. Previous studies that have supported the relationship between negative emotions and behavioral intentions have focused on midscale to upscale restaurants (A. Chen et al., 2015; Liu & Jang, 2009). Third, the ITF is the largest tourism trade show in Taiwan, and exhibitors offer deals that were exclusive to trade show visitors (J. Y. Wong et al., 2014). Thus, negative emotions might not stop visitors from visiting the ITF in the future if they are searching for a good deal. Furthermore, the ITF is held once per year; therefore, the effect of negative emotions may have diminished after a year.

#### *Theoretical Implications: The Effects of Stimuli*

With regard to the factors that influence positive and negative emotions, there are several issues that warrant further discussion. First, service staff quality was found to be a stimulus that was likely to affect both positive and negative emotions. This finding confirmed the significance of service staff quality in the context of tourism trade shows. Whether the service personnel were knowledgeable about the environment and participants (e.g., the conference center facilities and trade show schedule), whether they were willing to take the extra step to assist visitors, and whether they were reliable were factors that were likely to affect visitors' positive and negative emotions. One explanation for this result is that a trade show is an environment in which multiple providers promote somewhat similar products to potential buyers. In addition, trade shows are usually hosted in a large area where visitors may become disoriented. In this context, superior service may significantly contribute to visitors' positive and negative emotions. This study's findings on service staff quality are aligned with the existing retail, service, and hospitality literature (e.g., A. Chen et al., 2015; Jang & Namkung, 2009; J. H. Lee & Hwang, 2011).

Second, based on a review of the literature (e.g., Scletrich, 1996; Shipley et al., 1993; Smith et al., 2003), the current study focused on the trade show environment's "information rate" when nonbusiness visitors examined the products that trade shows offered. The information rate refers to the novelty and complexity of the information that is provided to visitors during a trade show. Similar to Tai and Fung's (1997) findings, the results of this study showed that the information rate was likely to contribute to visitors' positive and negative emotions. If exhibitors offer products that are not available elsewhere (e.g., new group package tours) or products that are interesting (e.g., new destinations), visitors are likely to have positive emotions. If exhibitors do not offer such products, visitors are likely to have negative emotions. In previous retail and hospitality studies, scholars have placed more emphasis on tangible products, such as food (e.g., A. Chen et al., 2015; Grohmann et al., 2007; Jang & Namkung, 2009; Koo & Ju, 2010; J. H. Lee



et al., 2011; Ryu et al., 2012; Walsh et al., 2011). However, information is one of the key products that trade shows offer to exhibitors and visitors. Apart from Tai and Fung (1997), no known study has incorporated the information rate into the M-R model when the main product is information. This research contributes to the existing environmental psychology literature by confirming that the quality of intangible products, such as information, may affect consumers' emotions.

Third, contrary to this study's hypotheses, the atmosphere was not found to influence positive and negative emotions. This finding differed from those of previous works on other service consumption contexts (e.g., dining and shopping). It also differed from previous works on business traders who attended trade shows. Siu et al. (2012) and Wu and Weber (2005) confirmed that a trade show's atmosphere, such as its ambience, was important to business traders, whereas the results of the present study indicated that the suitability of a trade show's lighting, music, and décor were not found to affect nonbusiness visitors' positive or negative emotions.

This finding has two possible explanations. First, visitors do not use package tours and flight tickets during trade shows; therefore, it is likely that visitors are indifferent about trade shows' atmospherics. Second, unlike business traders, who generally have to stay at a trade show for a longer period to perform their duties (e.g., to meet and spend time with potential buyers and sellers), nonbusiness visitors have more flexibility in terms of their location. They can enter and exit the show at their leisure, and they can leave the show once they have purchased the products that they were seeking. For this reason, trade show atmospherics may not affect nonbusiness trade show visitors' positive and negative emotions.

#### *Theoretical Implications: The Moderating Effect of Customers' Expectations*

Visitors with high or low expectations may react differently to the service staff's quality at tourism trade shows. Perceptions of service staff quality were found to have an insignificant impact on the positive and negative emotions of less experienced

visitors but were found to have a significant influence on the positive and negative emotions of experienced visitors. The previous literature has offered little insight into these results. However, this study offers some potential explanations for these differences. Visitors with lower expectations may have higher tolerance for inferior service because they may not expect the trade show to offer anything more than information (e.g., the novelty and complexity of the tourism products that are shown). For this reason, the quality of information was found to affect both positive and negative emotions, but service staff quality was found to have no significant effect. Visitors with higher expectations were likely seeking more than tourism products and information. For these visitors, the process of obtaining this information was also important. Therefore, they most likely wanted service personnel to be knowledgeable about the environment and exhibitors. In addition, they likely expected these services to be delivered in a timely manner.

This study's results are consistent with those of previous studies showing that expectations are likely to moderate customers' buying behavior (A. Chen et al., 2015; Harrington et al., 2011; Kincaid, Baloglu, Mao, & Busser, 2010;). Furthermore, this study's findings indicate the scope of the moderating effect of expectations on the relationship between trade show stimuli and nonbusiness visitors' emotions.

#### *Managerial Implications*

In addition to the theoretical contributions presented above, this study has several managerial implications. The findings of this study may assist tourism trade show organizers in providing a trade show environment that is suitable for exhibitors who want to target nonbusiness buyers. These findings may also inform exhibitors who want to target nonbusiness buyers about the type of environment they should request from trade show organizers and conference centers. Furthermore, these findings may provide insight for convention center managers regarding how to effectively satisfy the needs of trade show organizers and exhibitors who want to target nonbusiness visitors. Trade show organizers might consider the following suggestions



to increase visitors' behavioral intentions, such as intentions to revisit and intentions to recommend.

First, in the tourism trade show context, the novelty and complexity of the information appear to be the most influential factors that affect visitors' positive and negative emotions. The top priority of trade show organizers is to ensure that exhibitors provide a range of offers and new products when they attend the show, such as new destinations, group package tours, and up-and-coming accommodation choices. When exhibitors agree to offer specific deals and products during the show, organizers can use mass media and social media to inform consumers of the deals and promote the show. Emphasizing that the deals are exclusive to attendees might further induce the general public to attend. The presence of a sufficient amount of novel information could likely contribute to visitors' positive emotions, which in turn could likely contribute to their revisit or recommendation intentions. Tourism trade show organizers should be concerned if exhibitors cannot provide a range of new offers and products to visitors.

Second, the knowledge of the service personnel (e.g., knowledge of which exhibitor is suitable for a visitor's needs) and whether services can be delivered to visitors in a timely manner are two factors that are likely to influence nonbusiness visitors' perceptions of service staff quality. These factors affect their positive emotions and their intentions to revisit and recommend. Perceptions of service staff quality are particularly important for visitors with high expectations because visitors with low expectations do not seem to value service staff quality. Providing training sessions to conference center and exhibitor service personnel is one method of improving a trade show's service staff quality. In addition, equipping service personnel with WiFi-enabled devices (e.g., tablets) or other communication devices (e.g., walkie talkies) might allow service personnel to deliver service to visitors in a timely fashion. Third, tourism trade show organizers should not overly emphasize atmospherics, such as creating a feeling of excitement and joy, because atmospherics seem to have no effect on general visitors' positive or negative emotions. Unlike the business traders investigated by previous scholars, nonbusiness visitors are not likely to

revisit or recommend a tourism trade show because it has a nice atmosphere.

Fourth, as this study shows, visitors with high and low expectations react differently to service staff quality. On the one hand, differentiating between visitors with high and low expectations is a difficult task because the ITF has 85,000 daily visitors. On the other hand, providing differentiated service staff quality for these groups of visitors might be beneficial for organizers and exhibitors because service personnel could be used more efficiently. Given that consumers can preorder their tickets online, organizers with a suitable marketing information system for data mining could ask customers a few questions to explore these consumers' expectations. After storing and analyzing this information, organizers could help service personnel to differentiate between visitors with high expectations and visitors with low expectations by providing uniquely designed tickets, such as different colored wristbands that also serve as admission tickets. By looking at a visitor's wristband color, service personnel could decide whether to provide more proactive service (e.g., approach visitors to determine whether they need anything) or less proactive service (e.g., provide service when approached by visitors).

Finally, this study's findings may have implications for exhibitors at the stall level. When targeting nonbusiness visitors, product and information of superior quality are essential regardless of visitor expectations. However, exhibitors may be even more effective by deploying their salesforce strategically. Experienced and competent salespeople should concentrate on serving visitors who have high expectations because these visitors' emotions have been found to be more responsive to competent staff. Additionally, it is to the benefit of management to identify staff who are more attentive and caring. These staff members may assist visitors with high expectations more effectively because they are able to better understand these visitors' needs. When serving visitors who have high expectations, managers could make their salespeople more efficient by giving them more autonomy, such as allowing salespeople to give a discount as they see fit when closing a deal. These visitors have been found to react positively when they can obtain assistance in a timely fashion.

## Limitations, Future Studies, and Conclusions

To conclude, trade shows are an important promotional channel for the tourism industry. Within the trade show industry, the importance of the Asia-Pacific market is increasing. For tourism trade shows that are open to the public, an understanding of the determinants of nonbusiness attendees' future behavioral intentions is relevant because most existing studies have focused on the relationships among convention centers, exhibitors, and business traders. By examining Taiwanese tourism trade show visitors' future behavioral intentions and incorporating expectations as a moderator in a modified M-R model, this study sheds new light on existing theory and practice. The findings of this study contribute to the literature on tourism trade shows and trade show management by identifying the stimuli that affect visitors' emotions and behavioral intentions. Additionally, this study shows that expectations can moderate the influence of trade show stimuli on visitors' emotions. The implications of these findings for practitioners, such as exhibition center managers, conference organizers, and exhibitors, have also been proposed.

Although this study contributes to the literature on tourism trade shows and trade show management, it also has several limitations. First, due to the number of visitors to the ITF, which is approximately 85,000 per day, this research did not obtain data on the refusal rate. Future studies may want to track and explore whether these data can be used as an alternative indicator of visitors' perceptions of a trade show. Second, to maintain consistency, a 5-point Likert-type scale was used when designing the items. For this reason, the items from A. Chen et al.'s (2015) and Jang and Namkung's (2009) studies were changed from a 7-point Likert-type scale to a 5-point Likert-type scale. Scholars who study trade shows may want to further investigate whether these modifications affect trade show participants' responses. Finally, this study did not examine nonbusiness attendees' actual behavior of revisiting or recommending the same tourism trade show in the following year. Scholars could use a two-stage approach to examine whether attendees' intention to revisit or to recommend leads to actual behavior.

## References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Bagozzi, R. (1983). A holistic methodology for modelling consumer response to innovation. *Operations Research*, 31, 128–176.
- Bagozzi, R., & Yi, Y. (1988). On the evaluation of structural equation model. *Journal of the Academy of Marketing Science*, 16(1), 74–94.
- Baloglu, S., & Love, C. (2001). Association meeting planners' perceptions of five major convention cities: Results of the pre-test. *Journal of the Convention and Exhibition Management*, 3(1), 53–70.
- Bell, S., & Menguc, B. (2002). The employee-organization relationship, organizational citizenship behaviors, and the superior service quality. *Journal of Retailing*, 78(2), 131–146.
- Breiter, D., & Milman, A. (2006). Attendees' needs and service priorities in a large convention center: Application of the importance-performance theory. *Tourism Management*, 27(6), 1364–1370.
- Brennan, R., Canning, L., & McDowell, R. (2014). *Business-to-business marketing* (3rd ed.). London, UK: Sage Publications Ltd.
- Chen, A., Peng, N., & Hung, K. P. (2015). The effects of luxury restaurant environments on diners' emotions and loyalty: Incorporating diner expectations into an extended Mehrabian-Russell model. *International Journal of Contemporary Hospitality Management*, 27(2), 236–260.
- Chen, Y. F., & Mo, H. E. (2012). Attendees' perspectives on the service quality of an exhibition organizer: A case study of a tourism exhibition. *Tourism Management Perspective*, 1, 28–33.
- Devlin, J. F., Gwynne, A. L., & Ennew, C. T. (2002). The antecedents of service expectations. *Service Industries Journal*, 22, 117–136.
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement errors. *Journal of Marketing Research*, 18(1), 39–50.
- Gilboa, S., & Rafaeli, A. (2003). Store environment, emotions and approach behaviour: Apply environmental aesthetics to retailing. *The International Review of Retail, Distribution and Consumer Research*, 13(2), 195–211.
- Grohmann, B., Spangenberg, E. R., & Sprott, D. E. (2007). The influence of tactile input on the evaluation of retail product offerings. *Journal of Retailing*, 82(2), 237–247.
- Han, Y. J., Nunes, J. C., & Dreze, X. (2010). Signaling status with luxury goods: The role of brand prominence. *Journal of Marketing*, 74(4), 15–30.
- Han, H., & Ryu, K. (2009). The roles of the physical environment, price perception, and customer satisfaction in determining customer loyalty in the restaurant industry. *Journal of Hospitality & Tourism Research*, 33(4), 487–510.

- Harrington, R. J., Ottenbacher, M. C., & Kendall, K. W. (2011). Fine-dining restaurant selection: Direct and moderating effects of customer attributes. *Journal of Food-service Business Research*, 14(3), 272–289.
- Hume, M. (2008). Understanding core and peripheral service quality in customer repurchase of the performing arts. *Managing Service Quality*, 18(4), 349–369.
- Jang, S.-C., & Namkung, Y. (2009). Perceived quality, emotions, and behavioural intentions: Application of an extended Mehrabian-Russell model to restaurants. *Journal of Business Research*, 62(4), 451–460.
- Jung, M. (2005). Determinants of exhibition service quality as perceived by attendees. *Journal of Convention and Event Management*, 7(3/4), 85–98.
- Jurowski, C., & Gursoy, D. (2004). Distance effects on residents' attitudes toward tourism. *Annals of Tourism*, 31(2), 296–312.
- Kaltcheva, V. D., & Weitz, B. A. (2006). When should a retailer create an exciting store environment? *Journal of Marketing*, 70(1), 107–118.
- Kincaid, C., Baloglu, S., Mao, Z., & Busser, J. (2010). What really brings them back? The impact of tangible quality on affect and intention for casual dining restaurant patrons. *International Journal of Contemporary Hospitality Management*, 22(2), 209–220.
- King, S. C., & Meiselman, H. L. (2010). Development of a method to measure consumer emotions associated with foods. *Food Quality and Preference*, 21(2), 168–177.
- King, S. C., & Meiselman, H. L., & Carr, B. T. (2010). Measuring emotions associated with foods in consumer testing. *Food Quality and Preference*, 21(8), 1114–1116.
- Kline, R. B. (2005). *Principles and practices of structural equation modeling* (2nd ed.). New York, NY: The Guilford Press.
- Koo, D. M., & Ju, S. H. (2010). The interactional effects of atmospherics and perceptual curiosity on emotions and online shopping intention. *Computers in Human Behavior*, 26(3), 377–388.
- Kotler, P. (1973). Atmospherics as a marketing tool. *Journal of Retailing*, 49(4), 48–64.
- Kozak, N., & Kayar, C. H. (2008). Visitors' objectives for trade exhibition attendance: A case study on the East Mediterranean International Tourism and Travel Exhibition. *Event Management*, 12(3/4), 133–141.
- Lee, J. H., & Hwang, J. (2011). Luxury marketing: The influences of psychological and demographic characteristics on attitudes toward luxury restaurants. *International Journal of Hospitality Management*, 30(3), 658–669.
- Lee, M. J., Yeung, S., & Dewald, B. (2010). An exploratory study examining the determinants of attendance motivation as perceived by attendees at Hong Kong exhibitions. *Journal of Convention and Event Tourism*, 11(3), 195–208.
- Lee, S., Ha, S., & Widdows, R. (2011). Consumer responses to high-technology products: Product attributes, cognition, and emotions. *Journal of Business Research*, 64(11), 1195–1200.
- Leung, S. O. (2011). A comparison of psychometric properties and normality in 4-, 5-, 6-, and 11-point Likert Scales. *Journal of Social Service Research*, 37(4), 412–421.
- Liu, Y., & Jang, S.-C. (2009). The effects of dining atmospherics: An extended Mehrabian-Russell model. *International Journal of Hospitality Management*, 28(4), 494–503.
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. Cambridge, MA: MIT Press.
- Ministry of Economic Affairs. (2008). *Meeting, incentive, convention, and exhibition (MICE) industry: Analysis & investment opportunities*. Taiwan: Department of Investment Services.
- O'Hara, B. S. (1993). Evaluating the effectiveness of trade shows: A personal selling perspective. *Journal of Personal Selling & Sales Management*, 13(3), 67–77.
- Ong, F. S., & Khong, K. W. (2011). The effects of mall atmospherics and convenience on flow: A study of shoppers in Malaysia. *The Business & Management Review*, 1(2), 78–87.
- Ong, F. S., Khong, K. W., Faziharudean, T. M., & Dai, X. (2012). Path analysis of atmospherics and convenience on flow: The mediation effect of brand affect and brand trust. *The International Review of Retail, Distribution and Consumer Research*, 22(3), 277–292.
- Penz, E., & Hogg, M. K. (2011). The role of mixed emotions in consumer behaviour. *European Journal of Marketing*, 45(1/2), 104–132.
- Ryu, K., Lee, H. R., & Kim, G. (2012). The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intentions. *International Journal of Contemporary Hospitality Management*, 24(2), 200–223.
- Schlentrich, U. (1996). Business travel marketing. In T. Seaton & M. Bennett (Eds.), *Marketing tourism products: Concepts, issues and cases* (pp. 318–349). London, UK: Thomson.
- Seringhaus, F. H. R., & Rosson, P. J. (2001). Firm experience and international trade fairs. *Journal of Marketing Management*, 17(7/8), 877–901.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, 13, 290–312.
- Shipley, D., Egan, C., & Wong, K. S. (1993). Dimensions of trade show exhibiting management. *Journal of Marketing Management*, 9(1), 55–63.
- Siu, N. Y. M., Wan, P. Y. K., & Dong, P. (2012). The impact of the servicescape on the desire to stay in convention and exhibition centers: The case of Macao. *International Journal of Hospitality Management*, 31(1), 236–246.
- Smith, T. M., Gopalakrishna, S., Smith, P. M. (2004). The complementary effect of trade shows on personal selling. *International Journal of Research in Marketing*, 21(1), 61–77.
- Smith, T. M., Hama, K., & Smith, P. M. (2003). The effect of successful trade show attendance on future show interest: Exploring Japanese attendee perspectives of domestic

- and offshore international events. *Journal of Business & Industrial Marketing*, 18(4/5), 403–419.
- Tai, S. H. C., & Fung, M. C. (1997). Application of an environmental psychology model to in-store buying behavior. *The International Review of Retail, Distribution and Consumer Research*, 7(4), 311–337.
- Taiwan Visitors Association. (2017). *Taipei ITF, One of Asia's biggest travel fairs fun world! Lets go!* Retrieved from <http://www.taipeiitf.org.tw/Information1>
- Tanner Jr., J. F. (2002). Leveling the playing field: Factors influencing trade show success for small companies. *Industrial Marketing Management*, 31(3), 229–239.
- UFI. (2012). *Global exhibition barometer: Results of the survey conducted in December 2011 among UFI, SISO, AFIDA & EXSA members*. Retrieved from [https://media.eventreport.it/media/attach/2011/07/Global\\_Exhibition\\_Barometer\\_2011.pdf](https://media.eventreport.it/media/attach/2011/07/Global_Exhibition_Barometer_2011.pdf)
- Walsh, G., Shiu, E., Hassan, L. M., Michaelidou, N., & Beatty, S. E. (2011). Emotions, store-environmental cues, store-choice criteria, and marketing outcomes. *Journal of Business Research*, 64, 737–744.
- Westbrook, R. A. (1987). Product/consumption-based affective responses and postpurchase processes. *Journal of Service Marketing*, 24(3), 258–270.
- Wong, I. A., & Dioko, L. D. A. N. (2013). Understanding the mediated moderating role of customer expectations in the customer satisfaction model: The case of casinos. *Tourism Management*, 36, 188–199.
- Wong, J. Y., Li, T. H., Peng, N., & Chen, A. H. (2014). Conceptualizing trade show visitors' consumption behavior. *International Journal of Tourism Research*, 16(4), 325–328.
- Wu, A., & Weber, K. (2005). Convention center facilities, attributes and services: The delegates' perspective. *Asia Pacific Journal of Tourism Research*, 10(4), 399–410.
- Yi, Y., & La, S. (2004). What influences the relationship between customer satisfaction and repurchase intentions? Investigating the effects of adjusted expectations and customer loyalty. *Psychology & Marketing*, 21(5), 351–373.
- Yuksel, A. (2007). Tourist shopping habitat: Effects on emotions, shopping value and behaviors. *Tourism Management*, 28(1), 58–69.
- Yuksel, U., & Voola, R. (2010). Travel trade shows: exploratory study of exhibitors' perception. *Journal of Business & Industrial Marketing*, 25(4), 293–300.